

MITSUBISHI
PROGRAMMABLE CONTROLLERS
MELSEC-F

Changes for the Better

FX3U-7DM

USER'S MANUAL

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This manual describes the part names, dimensions, mounting, and specifications of the product. Before use, read this manual and the manuals of all relevant products fully to acquire proficiency in handling and operating the product. Make sure to learn all the product information, safety information, and precautions.

Store this manual in a safe place so that it can be taken out and read whenever necessary. Always forward it to the end user.

Registration:
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Effective September 2007
Specifications are subject to change without notice.

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Safety Precaution (Read these precautions before use.)

This manual classifies the safety precautions into two categories:

⚠DANGER

Indicates that incorrect handling may cause hazardous conditions, resulting in death or severe injury.

⚠CAUTION

Indicates that incorrect handling may cause hazardous conditions, resulting in medium or slight personal injury or physical damage.

Depending on the circumstances, procedures indicated by **⚠CAUTION** may also cause severe injury.

It is important to follow all precautions for personal safety.

Manual name	Manual No.	Description
FX3U-7DM-HLD User's Manual	JY997D15401	Explains the FX3U-7DM-HLD display module holder specifications for external dimensions and installation.
FX3U Series User's Manual - Hardware Edition	JY997D16501 MODEL CODE: 09R516	Explains the FX3U Series PLC specifications for I/O, wiring, installation, and maintenance.
FX3UC Series User's Manual - Hardware Edition	JY997D28701 MODEL CODE: 09R519	Explains the FX3UC Series PLC specifications for I/O, wiring, installation, and maintenance.

For the operation of the display module, refer to the PLC main unit manual.

→ **Refer to the FX3U Series User's Manual - Hardware Edition**
→ **Refer to the FX3UC Series User's Manual - Hardware Edition**

How to obtain manuals

For product manuals or documents, consult with the Mitsubishi Electric dealer from who you purchased your product.

Applicable standard

FX3U-7DM units made in May, 2005 or later comply with the EC Directive (EMC Directive). Further information can be found in the following manual. However, the FX3UC-32MT-LT does not comply with the EC Directive (EMC Directive).

→ **Refer to the FX3U Series Hardware Manual (Manual No. JY997D18801)**

1. Outline

The FX3U-7DM display module (hereinafter called display module) is installed to the FX3U / FX3UC-32MT-LT (provided as standard equipment) PLC main unit to display messages (alphabet, numbers, and Japanese characters) or to monitor/change device states.

1.1 Incorporated Items

Verify that the following product and items are included in the package:

FX3U-7DM display -module Display module mounting top cover Manual

1.2 External Dimensions and Part Names

Unit: mm (inches)

MASS (Weight): Display module 20g (0.05lbs)
Display module mounting top cover 10g (0.03lbs)

Display module

Display module mounting top cover

No.	Name	Description
[1]	Display	Displays current time and monitored status of device.
[2]	"ESC" button	Use to cancel operation or return to previous screen.
[3]	"-" button	Use to move cursor or set the value.
[4]	"+" button	Use to move cursor or set the value.
[5]	"OK" button	Use to choose the item, set the value, etc.
[6]	Connector for main unit	Used to connect display module to main unit.
[7]	Top cover fixing hook	Fixes the display module installing top cover on PLC.

1.3 Installation Example

Install to main unit

Install to control panel

→ For installation, refer to FX3U-7DM-HLD User's Manual.

2. Installation and Remove

INSTALLATION PRECAUTIONS

⚠DANGER

- Make sure to cut off all phases of the power supply externally before attempting installation or wiring work.
Failure to do so may cause electric shock or damage to the product.

INSTALLATION PRECAUTIONS

⚠CAUTION

- Use the product within the generic environment specifications described in PLC main unit manual (Hardware Edition).
Never use the product in areas with excessive dust, oily smoke, conductive dusts, corrosive gas (salt air, Cl₂, H₂S, SO₂, or NO₂), flammable gas, vibration or impacts, or exposed to high temperature, condensation, or rain and wind.
If the product is used in such conditions, electric shock, fire, malfunctions, deterioration or damage may occur.
- Do not touch the conductive parts of the product directly.
Doing so may cause device failures or malfunctions.
- Connect display module securely to their designated connectors.
Loose connections may cause malfunctions.

The following section describes the installation method for the FX3U/FX3UC-32MT-LT Series PLC (FX3U Series PLC is used for the following example).

For more details on installation and removal, refer to the PLC main unit manual.

→ **Refer to the FX3U Series User's Manual - Hardware Edition**
→ **Refer to the FX3UC Series User's Manual - Hardware Edition**

- Power off the PLC.
- Pushing the top cover hook (fig. A), remove the top cover (fig. B), as shown in the right figure.

- When installing
Install the display module (fig. C) to E on the main unit (fig. D) as indicated with the arrow 3).
- When removing
Remove the display module (fig. C) from the main unit (fig. D) as indicated with the arrow 3'.

- Place the G side of the display module mounting top cover (fig. F) onto the main unit (fig. D).
- The display module mounting top cover (fig. F) is installed in the Main module (fig. D) as shown in the right figure.

3. Specifications

STARTUP AND MAINTENANCE PRECAUTIONS

⚠CAUTION

- Do not disassemble or modify the PLC.
Doing so may cause fire, equipment failures, or malfunctions.
* For repair, contact your local Mitsubishi Electric distributor.
- Do not drop the product or exert strong impact to it.
Doing so may cause damage.

DISPOSAL PRECAUTIONS

⚠CAUTION

- Please contact a certified electronic waste disposal company for the environmentally safe recycling and disposal of your device.

TRANSPORT AND STORAGE PRECAUTIONS

⚠CAUTION

- The product is a precision instrument. During transportation, avoid any impacts.
Failure to do so may cause failures in the product. After transportation, verify the operations of the product.

3.1 Applicable PLC

Model	Applicability
FX3U Series PLC	Ver. 2.20 or later (from first production)
FX3UC-32MT-LT PLC*	Ver. 1.00 or later (from first production)

* FX3UC-32MT-LT has this display module provided as standard equipment.

3.2 Display Specifications

Item	Description	
Display device/ backlight	STN monochrome liquid crystal display/ Backlight: LED (green)	
Displayed letters	Number of letters	16 letters × 4 lines (2 byte letter: 8 letters × 4 lines)
	Character	Alphabets, Numbers, Japanese character, Shift JIS Level-1, 2
	Language for menu display	Japanese/English
Button	4 operation buttons (OK, ESC, +, and -)	

3.3 General Specifications

The general specifications are equivalent to the PLC main unit.

For general specifications, refer to the following manuals.

→ **Refer to the FX3U Series User's Manual - Hardware Edition**
→ **Refer to the FX3UC Series User's Manual - Hardware Edition**

3.4 Power Supply Specifications

5V DC, 20 mA is supplied from the internal power supply of the main unit.

4. Function List

For the function list, refer to the PLC main unit manual.

→ **Refer to the FX3U Series User's Manual - Hardware Edition**
→ **Refer to the FX3UC Series User's Manual - Hardware Edition**

This manual confers no industrial property rights or any rights of any other kind, nor does it confer any patent licenses. Mitsubishi Electric Corporation cannot be held responsible for any problems involving industrial property rights which may occur as a result of using the contents noted in this manual.

Warranty

Mitsubishi will not be held liable for damage caused by factors found not to be the cause of Mitsubishi; opportunity loss or lost profits caused by faults in the Mitsubishi products; damage, secondary damage, accident compensation caused by special factors unpredictable by Mitsubishi; damages to products other than Mitsubishi products; and to other duties.

⚠ For safe use

- This product has been manufactured as a general-purpose part for general industries, and has not been designed or manufactured to be incorporated in a device or system used in purposes related to human life.
- Before using the product for special purposes such as nuclear power, electric power, aerospace, medicine or passenger movement vehicles, consult with Mitsubishi Electric.
- This product has been manufactured under strict quality control. However when installing the product where major accidents or losses could occur if the product fails, install appropriate backup or failsafe functions in the system.